

## **CITY OF ATLANTA GEORGIA CLASSIFICATION SPECIFICATION**

**Job Title: Communications/Electronics Technician, Senior**

**Date: 1995**

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### **Purpose of Job**

The purpose of this job is to maintain the communications systems used within an assigned department. Duties include, but are not limited to: providing electronic technical service for all radio, telephone, paging and alarm systems and personal computers and peripherals; troubleshooting and conducting a variety of electronic, mechanical and electromechanical tests on electronic systems, subassemblies and parts to ensure unit functions according to specifications or to determine cause of unit failure; and repairing and maintaining electronic equipment.

### **Essential Duties and Responsibilities**

**The following duties are normal for this job. These are not to be construed as exclusive or all-inclusive. Other duties may be required and assigned.**

#### **Productivity and Accountability:**

- Installs and repairs a variety of electronic equipment including alarm and public address systems, pagers, portable chargers, mobile radios and data terminals, dispatch console, video monitoring system, microphones, personal computers and peripherals.
- Checks functioning of newly installed equipment to evaluate system performance under actual operating conditions.
- Maintains and repairs as needed comparators, repeater and base stations, generators, microwave transceiver and multiplex, satellite receivers, tower grounding, etc.
- Programs portable and mobile radios, alarm systems, code plugs, pagers, etc.; installs cables for computer networking.
- Troubleshoots equipment failures; reads test schedule, work orders, test manuals, performance specifications, wiring diagrams and schematics to determine testing procedure and equipment to be used.
- Connects unit to be tested to test equipment; reads dials or digital displays that indicate electronic characteristics such as voltage, frequency, distortion, inductance, and capacitance.

- Makes repairs by replacing defective components and wiring and adjusting mechanical parts; records defects on tag, attaches to unit and sends unit to manufacturer for repair if necessary.
- Performs maintenance and repairs in a timely and efficient manner in order for minimum down time.

**Planning and Organizing:**

- Coordinates vehicle equipment repairs and new installations with City vehicle maintenance units.
- May draw sketches to clarify design details and functional criteria of electronic units and systems to prepare for efficient maintenance and repair down time.
- Inventories and orders supplies and equipment; arranges delivery of equipment; prioritizes repairs according to sworn and civil personnel.

**Communication:**

- Converses with equipment end-user such as operators, police personnel, etc., to ascertain problems with equipment before breakdown and to determine if breakdown is due to human error or mechanical problems.
- Confers with manufacturers' engineers, technicians and others regarding testing procedures and results and to resolve problems.
- Notifies supervisor of problems with communications equipment.
- Answers the telephone; provides information, advice and guidance; takes and relays messages and/or direct calls to appropriate personnel; returns calls as necessary.

**Administrative Duties:**

- Maintains current technical library of manuals, schematics and technical updates, policy and procedures, employee handbooks, various maps, etc., for reference and/or review.
- Substitutes for co-workers in temporary absence of same; performs flexible unit assignments as needed in emergency response; performs other administrative tasks as assigned.
- Reads literature to stay abreast of activities and projects of external agencies; reviews various trade and professional journals and publications.
- Attends meetings, seminars and training sessions as required to remain knowledgeable of departmental and city operations, to promote improved job performance and to stay current with changing state/municipal policies, procedures, codes and criminal/civil case law.

**Quality Assurance:**

- Aligns, adjusts and calibrates test instruments and equipment according to specifications.
- Tests faulty equipment, electronic components and circuits; applies knowledge of functional operation of electronic units and systems to diagnose cause of malfunction and to locate defects.

- Tests functional performance of systems, subassemblies and parts under specified environmental conditions such as temperature change, vibration, pressure, and humidity.

**Problem Identification and Solution:**

- Analyzes and interprets test data/results on defective units to determine cause of failure.
- Compares results with specifications and records test data.

**Equipment Use and Maintenance:**

- Utilizes various test equipment such as oscilloscope, frequency meter, power supply, capacitor tester and digital voltmeter, etc., to check and repair electronic equipment.
- Operates a computer, hand and power tools, etc., to perform maintenance and troubleshooting tasks and to enter, store and retrieve data to prepare and produce reports, compose routine correspondence and disseminate information to others on the system; uses knowledge of various software programs in an effective and efficient manner.
- Operates a photocopy machine to copy and a facsimile machine to transmit and receive correspondence, documents and reports; uses a typewriter to complete forms and documents; uses a calculator to compile and compute numbers for reports and statistics.
- Operates a vehicle to mobilize to sites to perform repair and maintenance tasks; inspects maintenance of vehicle prior to using and requests service and/or repairs as needed; operates and utilizes various radio devices for communications.

**Record Keeping and Documentation:**

- Maintains records of equipment in need of repair, installations, removals, repairs, calibrations, and tests; maintains statistics on radio repair inventory.
- Prepares parts lists for procurement of replacement parts for repairs; completes maintenance requests for equipment needing service and/or repair.
- May write technical reports and develop charts, graphs or schematics to describe and illustrate system's operating characteristics, malfunctions, deviations from design specifications and functional limitations.
- Completes daily time sheet and activity reports, weekly unit report, vehicle sign-out and maintenance requests, travel time sheet and mileage log, and various other documents, forms and reports; maintains files and records.

**Interpersonal Relations:**

- Assists alarm and switch board operators, dispatchers, officers and other personnel with technical problems.
- Cooperates with federal, state, and local law enforcement agencies and its officers or representatives when their activities or investigations are related to on-going investigations being conducted by the Atlanta Police Department; works to achieve the highest level of cooperation and efficiency possible.

**Marginal Job Functions**

- Performs other related duties as required.



### **Knowledge of Job**

Has general knowledge of the principles, practices and procedures of the City, Police Department and the various department operations and functions. Has general knowledge of electronic theory, equipment and technology, communication systems and local law enforcement practices, policies and procedures as necessary in the completion of daily responsibilities. Is able to follow policies, procedures, plans and activities and to perform to established goals. Knows how to perform operations and comply with staff plans and objectives for the expedience and effectiveness of specific duties of the City. Is able to implement long-term goals for the department in order to promote effectiveness and efficiency. Has general knowledge of all applicable laws, ordinances, policies, standards and regulations pertaining to the specific duties and responsibilities of the job. Knows how to keep abreast of any changes in policy, methods, operations, equipment needs, etc. as they pertain to departmental operations and local law enforcement activities. Is able to effectively communicate and interact with supervisors, elected officials, employees, members of the general public and all other groups involved in the activities of the City as they relate to the department. Is able to assemble information and make written reports and documents in a concise, clear and effective manner. Has good organizational, human relations, and technical skills. Is able to use independent judgement and discretion in the handling of emergency situations, determining and deciding upon procedures to be implemented, setting priorities, maintaining standards, and resolving problems. Has the ability to comprehend, interpret, and apply regulations, procedures, and related information. Has comprehensive knowledge of the terminology, principles and methods utilized within the department. Has the mathematical ability to handle required calculations. Is knowledgeable and proficient with computers. Is able to read, understand and interpret reports and related materials.

### **Minimum Training and Experience Required to Perform Essential Job Functions**

High school diploma or GED required, vocational/technical school diploma in Electronics, Radio communications or related field preferred; with one year experience as a Communications/Electronic Technician; or any equivalent combination of education, training, and experience which provides the requisite knowledge, skills, and abilities for this job.





**(ADA) MINIMUM QUALIFICATIONS OR STANDARDS REQUIRED  
TO PERFORM ESSENTIAL JOB FUNCTIONS**

**PHYSICAL REQUIREMENTS:** Must be physically able to operate a variety of job related machines and office equipment. Must be able to move or carry related objects or materials. Physical demand requirements are at levels of those for active work.

**DATA CONCEPTION:** Requires the ability to compare and/or judge the readily observable functional, technical, structural, compositional or identifiable characteristics (whether similar to or divergent from obvious standards) of data, people, or things.

**INTERPERSONAL COMMUNICATION:** Requires the ability to communicate with people to convey or exchange professional information.

**LANGUAGE ABILITY:** May require the ability to read a variety of professional, technical and administrative documentation, directions, instructions, methods and procedures. May be required to produce reports with proper format, punctuation, spelling and grammar, using all parts of speech. Requires the ability to communicate with and before others using correct English.

**INTELLIGENCE:** Requires the ability to learn and understand subject matter principles and techniques; to make independent judgments in absence of supervision within the scope of respective job duties and tasks; to acquire and be able to expound on knowledge of topics related to primary occupation.

**NUMERICAL APTITUDE:** May require the ability to utilize mathematical formulas; add and subtract; multiply and divide totals; determine percentages; determine time and weight; and interpret same as may be appropriate.

**FORM/SPATIAL APTITUDE:** Requires the ability to inspect items for proper length, width, and shape.

**MOTOR COORDINATION:** Requires the ability to utilize job related equipment in the course of accomplishing job duties and tasks associated with respective primary duties.

**COLOR DISCRIMINATION:** May require the ability to differentiate colors and shades of color.

**INTERPERSONAL TEMPERAMENT:** Requires the ability to interact with people (i.e. staff, supervisors, general public and elected officials) beyond giving the receiving instructions. Must be adaptable to performing under minimal stress when confronted with an emergency.